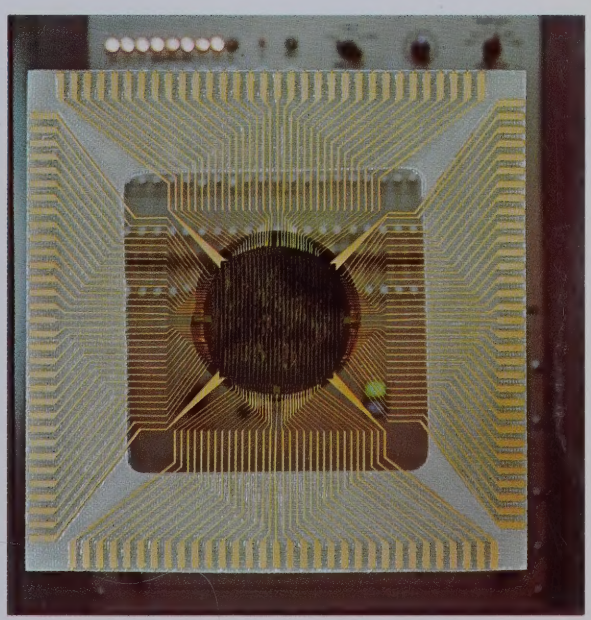
1966 ANNUAL REPORT

TEXAS INSTRUMENTS INCORPORATED



TI products demonstrate results of technical change. Left to right: Copper-clad aluminum is beginning to replace solid copper in communications lines • New generation of electronic equipment is being designed around Integrated Equipment Components, the next step after integrated circuits (picture illustrates packaging and interconnection technology for a 247-circuit array in 1¼-inch diameter silicon wafer) • Terrain following radar helps military pilots avoid detection by enemy • Advanced seismic exploration technology reveals hidden traps for oil • Controls plant at Aversa, Italy, dedicated in May, illustrates TI international growth and diversity of markets served. The company now has 20 manufacturing plants in 11 countries.

Annual Meeting of Stockholders

The 1967 Annual Meeting of stockholders of Texas Instruments Incorporated will take place at 10:00 a.m. (CST), April 19th, in the North Building Cafeteria at 13500 North Central Expressway, Dallas, Texas.

Ten-Year Review TEXAS INSTRUMENTS INCORPORATED AND SUBSIDIARIES *In Thousands of Dollars (Except earnings and dividends per share which are in dollars)*

	Years Ended December 31									
Operations	**1966**	**1965**	**1964**	**1963**	**1962**	**1961**	**1960**	**1959***	**1958**	**1957**
Net sales	$580,314	$436,369	$327,579	$276,477	$240,693	$233,223	$232,713	$193,213	$91,954	$67,339
Income before provisions for income taxes, redeterminations, and renegotiation	63,722	46,273	34,857	25,087	16,381	19,892	29,435	28,855	12,936	7,464
Provisions for income taxes, redeterminations, and renegotiation	29,768	21,434	16,816	12,948	7,824	10,446	13,947	14,712	6,935	3,699
Net income	33,954	24,839	18,041	12,139	8,557	9,446	15,488	14,143	6,001	3,765
Earned per common share outstanding†										
— at year-end	3.14	2.46	1.80	1.21	.85	.94	1.57	1.43	.74	.45
— average during year‡	3.30	2.46	1.80	1.22	.85	.95	1.57	1.44	.74	.46
Cash dividends paid per common share†	.55	.50	.40	.32	.24	—	—	—	—	—
Financial Condition										
Total current assets	$252,825	$186,067	$123,500	$105,967	$ 90,263	$ 82,479	$ 72,351	$ 64,842	$36,970	$22,264
Total current liabilities	111,262	88,418	65,627	50,985	37,216	36,280	35,197	37,266	18,900	11,076
Working capital	141,563	97,649	57,873	54,982	53,047	46,199	37,154	27,576	18,070	11,188
Property, plant, and equipment at cost	203,932	141,707	107,635	93,957	81,651	78,736	73,676	60,806	26,773	22,659
Accumulated depreciation	79,616	59,806	50,626	45,840	39,017	33,699	27,646	20,083	10,281	7,550
Property, plant, and equipment (net)	124,316	81,901	57,009	48,117	42,634	45,037	46,030	40,723	16,492	15,109
Other noncurrent assets	5,339	2,858	348	362	433	453	285	429	329	343
	271,218	182,408	115,230	103,461	96,114	91,689	83,469	68,728	34,891	26,640
Long-term debt, less current portion	51,935	48,708	3,937	5,700	7,463	9,225	10,988	12,000	9,250	7,000
Deferred incentive compensation	1,963	1,082	—	—	—	—	—	—	—	—
Shareowners' equity	$217,320	$132,618	$111,293	$ 97,761	$ 88,651	$ 82,464	$ 72,481	$ 56,728	$25,641	$19,640
Common shares outstanding†										
— at year-end	10,800,240	10,096,526	10,048,430	9,987,520	9,870,594	9,861,436	9,811,850	9,786,824	8,142,470	8,142,470
— average during year‡	10,291,973	10,091,248	10,011,217	9,894,919	9,866,837	9,836,509	9,801,803	9,755,055	8,142,470	7,805,202

**Operations of Metals & Controls Corporation are included for the first time in 1959, the year it merged into TI, as a "pooling of interests."*
†Adjusted for 2-for-1 stock split in 1966 and for the 25% stock distribution in 1963. Earnings per share are computed after preferred dividends in 1957 and 1959-63. (There was no preferred stock outstanding in 1958 or subsequent to 1963.)
‡Average of the shares outstanding at the beginning of the year and the end of each month during the year.

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Consolidated Financial Summary

In Thousands of Dollars (Except earnings and book value per share which are in dollars)

	1966	1965
Net sales	$580,314	$436,369
Income before taxes and other provisions	63,722	46,273
Net income	33,954	24,839
Earned per common share outstanding		
— at year-end	3.14	2.46*
— average during year†	3.30	2.46*
Dividends declared on common stock	5,937	5,046
Current assets	252,825	186,067
Current liabilities	111,262	88,418
Working capital	141,563	97,649
Property, plant, and equipment (less accumulated depreciation)	124,316	81,901
Long-term debt	51,935	48,708
Shareowners' equity	217,320	132,618
Book value per share of common stock outstanding at year-end	20.12	13.13*
Common shares outstanding		
— at year-end	10,800,240	10,096,526*
— average during year†	10,291,973	10,091,248*
Employees at year-end	38,686	34,519
Shareowners at year-end	19,903	16,566

**Adjusted for 2-for-1 stock split in 1966.*
†Average of the shares outstanding at the beginning of the year and the end of each month during the year.

To the Shareowners of Texas Instrum

The Process of Creating Change

Change – in human affairs, stimulated by accelerating change in science and technology – is the outstanding characteristic of the twentieth century. Particularly in the past two-and-a-half decades, a high rate of technical change has become the prevailing climate of our times. In this climate, the most successful industrial organizations are those which contribute to the formation and the maintenance of the climate itself.

Over the past twenty-five years, since Texas Instruments began to develop from the small petroleum geophysical exploration company that it was to the international manufacturing and professional service organization it is today, the company has been more and more deeply involved in the process of creating change.

This process at Texas Instruments is one of deliberate, planned innovation in each of the basic areas of industrial life – creating, making, and marketing – and it is one of management of this innovation so as to provide continuing stimulus to the company's growth in usefulness to society and as a business institution.

The process, successfully applied, solves emerging as well as existing problems for the company's customers – and helps render more effective their own contributions to creating change.

Results of the process in action are the subject of this 1966 Annual Report.

Texas Instruments continued its long-term trend of growth during 1966. Sales and earnings reached new highs. The gains came from balanced growth across all major business areas of the company.

Sales up 33%; Earnings Rose 37%

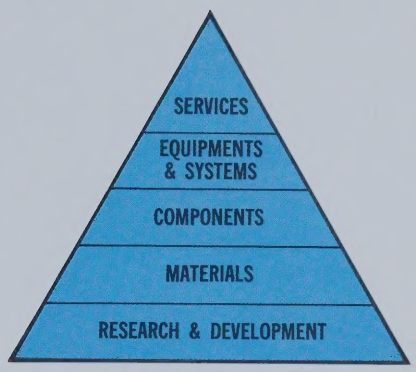
Sales billed of $580.3 million increased 33% over 1965. Approximately 20% of sales billed was from operations outside the United States. The total backlog at year-end was $241 million, compared to $218 million a year earlier. Earnings after taxes rose to $34 million, up 37% over 1965. Earnings per share of common stock on the basis of the shares outstanding December 31 were $3.14, also a new record, and up 28% over 1965. Earnings per share were $3.30 on the basis of the average number of shares outstanding during 1966, including 599,031 shares of the stock offering of September, 1966. Net proceeds of the offering amounted to $53.6 million.

Stock Split 2-for-1; Dividend Increased

At the annual meeting in April, shareowners voted approval of a two-for-one split of the common stock, effective April 29, 1966. The quarterly cash dividend was raised in June to 15 cents per share on the split shares, amounting to a 20% increase on an annual basis.

Planning and Control System Important

Management planning and control techniques used at all levels throughout the company's operating structure contributed importantly to the year's success. These techniques have been developed over the past several years as a system of establishing business objectives, strategies, and tactical action programs for guiding the company's future development while exercising control over cur-



TI sales and earnings reached record highs through balanced growth.

ncorporated:

rent operations. In developing this system, the company has identified the major courses of action it intends to pursue over the next ten-year period to achieve a new goal in growth of business activity.

New 10-Year Goal

As announced to shareowners at the annual meeting held last April, it is a goal of Texas Instruments to attain an annual level of $3 billion in sales by the end of the ten-year period. We wish to emphasize, however, that this level of sales is a goal and not a forecast, and that the year for its attainment – 1976 – is a target year and is not to be regarded as rigid or precise.

Additions to Plant and Equipment

In 1966, the company invested approximately $72 million in additions to plant and equipment around the world. New mechanization equipment helped increase semiconductor manufacturing efficiency. Capacity to produce clad metals, other materials products, and electrical controls increased. New generations of equipment for digital seismic data gathering and processing were introduced to handle the continuing high demand for these technical services.

Construction completed during the year increased company-owned plant and office space by 29%, bringing the total of owned space to 3,820,000 sq. ft. Leased space was increased 27% to a new total of 1,275,000 sq. ft.

Men and Women of TI Contributed to Success

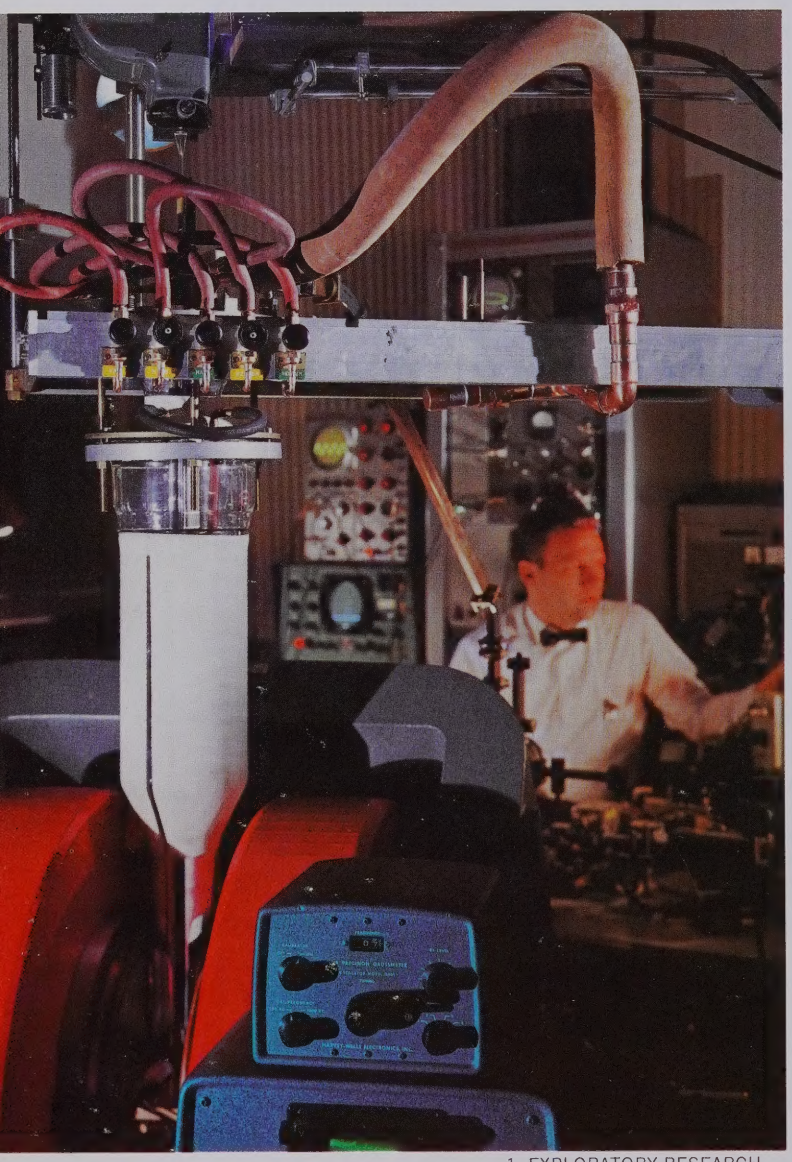
The high degree of motivation of the men and women of TI and their individual participation in forming and achieving the goals of the company have contributed in large measure to the success of 1966. Many are also shareowners personally or through the employee profit sharing plan.

Activities of the company in 1966 took place against a background of rapid economic expansion in the United States and in most international areas. The general rate of economic growth is expected to be appreciably slower in 1967. This will have an impact on the customers and markets served by TI, and while the year 1967 should show continued growth for Texas Instruments, it is not expected to be at as high a rate as in recent years.

Mark Shepherd, Jr.
President

P. E. Haggerty
Chairman of the Board

Dallas, Texas
February 23, 1967



1. EXPLORATORY RESEARCH . . .

Total Technical Effort

Innovations in creating, making, and marketing new products and services to solve the current and future needs of the company's customers start with investment in technical effort. In 1966, expenditures for research, development, and engineering were $79.6 million, up from $62.6 million in 1965. Approximately half this effort was supported by outside contracts, chiefly with the U.S. Government.

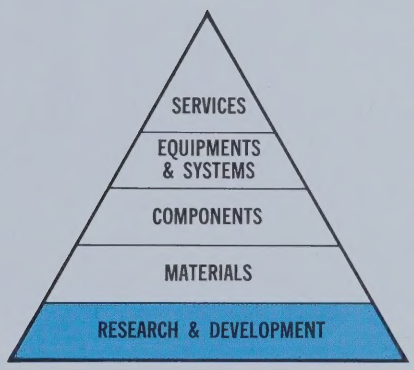
Exploratory research programs advanced the basic scientific knowledge of the company. Tactical research, in the operating divisions as well as in the Central Research Laboratories, applied the findings of science to specifically identified problems of customers and their areas of business. Engineering development turned problem solutions into useful products and production processes. The following examples illustrate the broad range of these programs.

New Generations of Electronics

TI scientists and engineers are developing far-reaching changes in radar technology under the MERA (molecular electronics for radar applications) program for the U.S. Air Force. They made significant progress in combining semiconductor manufacturing and systems development skills to build a radar with arrays of integrated circuits. Each array is formed as a complete functional block which acts as a transmitter-receiver unit. The finished system will work through electronic scanning, and operate without the moving parts which limit the reliability of present radar systems.

Another development group worked to solve important problems in the field of information display. They delivered to the U.S. Air Force a laser display system that converts television camera images or similar electronic signals into flat

Research, Development & Engineering provide basis for technological change. Total Technical Effort expenditures rose to over $79 million in 1966.



screen color displays four times the size of the largest home television picture.

Basic research in infrared theory and materials technology continued. This work has helped make possible the company's advanced systems for airborne infrared reconnaissance.

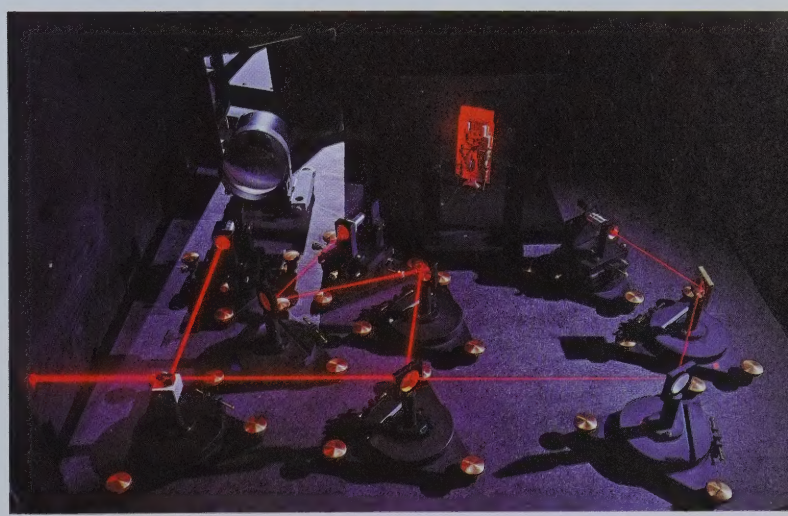
Geophysical research teams investigated the behavior of seismic waves in the crust, mantle, and core of the earth – to help locate natural resources, especially petroleum, and to detect and identify underground nuclear explosions.

Production Processes and Power Sources

Process engineers developed successful methods to produce copper-clad aluminum wire, an important new product, in tonnage lots.

TI materials specialists and production engineers brought change to the field of portable power supply. They developed a new line of products for the company – nickel-cadmium sealed cell batteries – and established automated techniques to produce the batteries with an exceptionally high degree of uniformity from cell to cell. This characteristic is especially important to multi-cell applications where high reliability is required, as in aircraft emergency power and telecommunications systems. The new product line includes batteries for cordless power tools and home appliances.

1. EXPLORATORY RESEARCH will help develop future generations of electronic components. Electronic structures and properties of crystalline imperfections are investigated by cooling single crystals to near absolute zero (—459.6°F) and subjecting them to strong magnetic fields and radiation. 2. LASER APPLICATIONS such as 3-D photography (holography) using a laser's coherent light, are continuing efforts in TI's Central Research Laboratories. 3. MICROWAVE ELECTRONIC COMPONENT (foreground), provides ultra-high-frequency signals, can replace klystron (background) in low-power radar systems. 4. NICKEL-CADMIUM BATTERIES, on test rack, developed from tactical research studies in energy conversion.

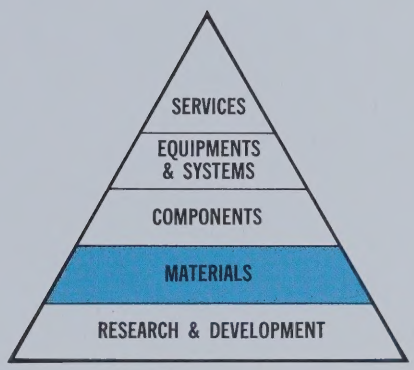


2. LASER APPLICATIONS . . .

3. MICROWAVE COMPONENT . . .

4. NICKEL-CADMIUM BATTERIES . . .

Materials systems created changes in metals markets. Leadership strengthened in chemical materials for semiconductor industry.



Materials

Changes in markets for metals began to appear more prominently in 1966. Clad metals produced by TI were becoming established as basic commodity materials. New applications made their successful debut in the marketplace, and existing products found wider acceptance. TI capacity for clad metal production increased five-fold over the 12-month period. A continued shortage of the world supply of critical metals, especially copper and silver, contributed to heightened interest in clad metal materials systems.

Clad Metals More Widely Used

When the new clad metal quarters and dimes of the U.S. mint began to appear in quantity in 1966, they demonstrated widely the capabilities of an engineered system to solve important materials problems.

These coins have been adopted to release silver for strategic and industrial uses. The company began to supply large quantities of the copper-nickel-copper coinage material to the U.S. Bureau of the Mint in 1965. Production continued throughout 1966, and a new contract was received for deliveries through mid-1967.

Copper-clad stainless steel cable shielding material was used for protection of underground communications and utility power lines from corrosion and damage by rodents. Aluminum-steel-copper tape, which TI began to produce late in the year, is another new material which will have applications in protecting such underground lines.

2. TONS OF COINAGE MATERIAL . . .

3. ULTRA-PURE SILICON . . .

1. CLAD METAL PRODUCTION at Attleboro, Massachusetts, plant. 2. TONS OF COINAGE MATERIAL, cupronickel clad on copper, were shipped to the U.S. Mint. 3. ULTRA-PURE SILICON, a principal material for the semiconductor industry, is produced by TI in Dallas.

1. CLAD METAL PRODUCTION . . .

In wire form, copper-clad aluminum can fill requirements formerly met only by solid copper. The new material entered the large markets for telephone cable, electrical power cable, community antenna television cable, household wiring, battery cable, and other communications and electrical applications.

Architects and building contractors used a TI clad metal materials system in their new construction programs. The material, copper-clad aluminum sheet, is used for gutters, flashing, downspouts, decorative and protective panels.

Automobile makers began to design for future use of clad metal trim material with special properties. The company's thermostat metal found new applications in the television industry to control color picture quality.

Silicon Manufacturing Capacity Increased

The company increased its capacity to manufacture ultra-pure silicon, a principal raw material of the semiconductor industry, with the construction of additional reactors at the Chemical Materials plant in Dallas. A chemical processing plant to produce trichlorosilane in liquid form was installed in 1966. This placed another step in silicon manufacturing under TI process control, and strengthened the company's position as a major supplier of silicon material.

Chemical materials made changes in other industries. Silicon carbide and titanium carbide, materials which are almost as hard as diamond, can be applied to the wearing surfaces of critical parts of industrial equipment. These materials prolong life of the parts where corrosion, abrasion, or friction offer problems. TI in 1966 improved its processes for depositing chemical materials on such equipment parts as nozzles, spindles, wear sleeves, and heat exchangers.

1. COPPER-CLAD ALUMINUM PANELS . . .

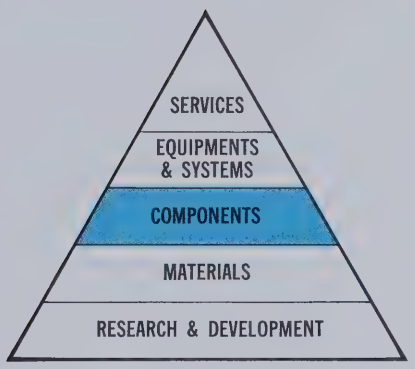
2. TV PICTURE TUBE YOKE . . .

1. COPPER-CLAD ALUMINUM PANELS decorate columns of new TI manufacturing plant in Dallas. 2. TV PICTURE TUBE YOKE to control deflection of electron beams uses copper-clad aluminum magnet wire. 3. TI CLADS GOLD to lower-cost materials to fabricate electrical contacts for computers. 4. GALLIUM ARSENIDE light emitters provide computer manufacturers with high reliability replacements for tungsten lamps. 5. WINDSHIELD WIPER LINKAGE uses phosphor-bronze clad stainless steel.

. TI CLADS GOLD . . .

4. GALLIUM ARSENIDE . . .

5. WINDSHIELD WIPER LINKAGE . . .



Pervasive spread of electronics broadened applications of semiconductors. Electrical controls sales hit new highs.

Components

The lives of more and more people throughout the world were influenced in 1966 either directly or indirectly by the use of solid-state electronics – in business machines such as computers, in industrial equipment, in household articles such as cameras, electric mixers, floor polishers, washer/driers, radio and television sets, and in military and space equipment and systems.

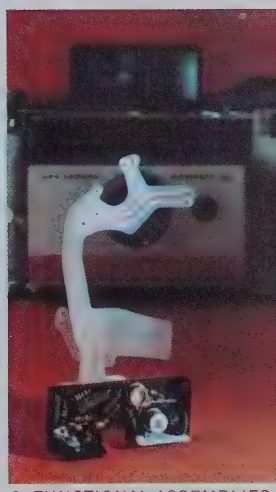
Semiconductor Markets Grew

The company's sales of electronic components established new highs in both unit and dollar volume. Continuing its leadership in the highly competitive semiconductor industry, TI increased mechanization of manufacturing and test facilities for large volume production, and provided customers with more electronics per package.

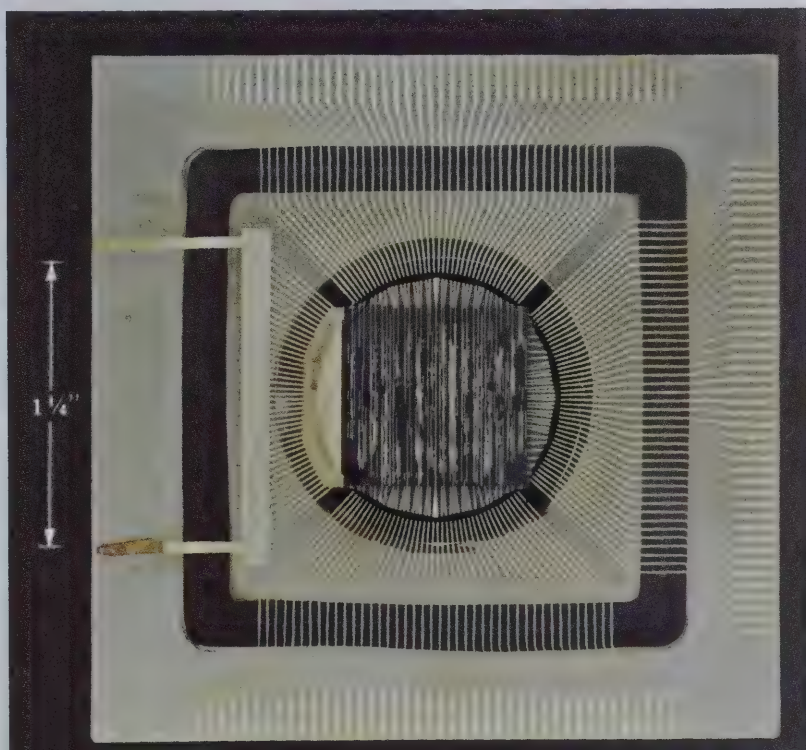
The U.S. market demand for all semiconductors, including transistors, diodes, rectifiers, and integrated circuits, was up approximately 28% from 1965. Demand outside the U.S. also expanded. The company enlarged its semiconductor manufacturing operations in the U.S., England, and France, and commenced semiconductor production in Canada and Germany.

High volume, low cost plastic transistors pushed semiconductor applications deeply into industrial and consumer products. Production was expanded

2. INCREASED PRODUCTION MECHANIZATION . . .



3. FUNCTIONAL ASSEMBLIES



1. THREE GENERATIONS OF CHANGE in electronics are illustrated by this computer circuit. Same function is performed by vacuum tube assembly (background), transistor circuit board (center), and multi-function integrated circuit (foreground). 2. INCREASED PRODUCTION MECHANIZATION in U.S., Canada, England, and Germany helped TI meet strong industrial and consumer market demand for plastic encapsulated transistors. 3. FUNCTIONAL ASSEMBLIES, such as this Polaroid Land Camera shutter control, provide customers with electronic building blocks. 4. THE NEXT GENERATION of electronic components will come through large scale integration of circuit functions. This array contains 157 complete computer circuits, each the equivalent of nine devices such as transistors, diodes, resistors, and capacitors.

and further mechanized for silicon metal-case transistors and glass diodes to meet the steadily increasing demand for silicon products.

The integrated circuit made its largest impact on the semiconductor industry in 1966. Within a very small chip of silicon material, an integrated circuit performs the electronic amplifying and switching operations of many separate devices. The company's more complex units now perform 10 to 20 circuit functions in each package, doing the work of more than 100 transistors, diodes, and other circuit components. Product development moved ahead rapidly. Over 240 standard types of integrated circuits were available from TI by year-end, compared to 136 in 1965.

The Next Step: Integrated Equipment Components

Vacuum tubes, transistors, and integrated circuits represent three generations in the evolution of technical change in electronics. The next step will carry electronic components to the level of "integrated equipment components" (IECs). Significant technological advances in 1966 refined TI's techniques to integrate electronic functions on a large scale. The company employed its diverse skills in materials technology, semiconductor manufacturing, engineering design, and systems development to bring the fourth generation of electronic components closer to realization.

Developmental work produced arrays of integrated circuits which combine up to 157 complete circuit functions in a wafer of silicon 1¼ inches in diameter. The U.S. Air Force awarded the company a contract to develop integrated equipment components with as many as 1000 circuits in a single silicon wafer.

When realized as production items in everyday use, this fourth generation of electronic components will enable the performance of many jobs not yet done electronically, or not yet even possible to do – in industry, in homes, and in military, space and other systems for government use.

Components for Control

Some of these areas for change and growth could be seen in 1966 in the rising demand for the company's electrical control products, such as switches, circuit breakers, motor protectors, temperature-sensing and moisture-sensing elements. All of these products are related to the control of electric current, either "on" or "off" or supplied in regulated amounts to power equipments and systems to do specific jobs – home-heating, for example, or air conditioning, or refrigeration, or washing and drying clothes.

TI increased the diversification of its products to do more of the control job within the end equipment. In home refrigerators, TI controls sensed moisture build-up and automatically controlled defrost cycles. For the textile industry, the company introduced new heat- and moisture-sensing controls to solve problems in processing synthetic fibers. In the home, clothing made from these same fibers was protected with washing and drying cycle-time electronic controls.

Hermetic glass-to-metal seals have been used for years to protect the active elements of transistors and other semiconductor devices. Technology gained from semiconductor manufacturing skills is now contributing to change in electrical switches for high-reliability space systems requirements.

TI increased controls production capacity in Holland, and added controls production in England. Controls production also increased in Australia, Mexico, and Brazil. Construction started on a new controls plant in Argentina.

1. CINCINNATI MILLING

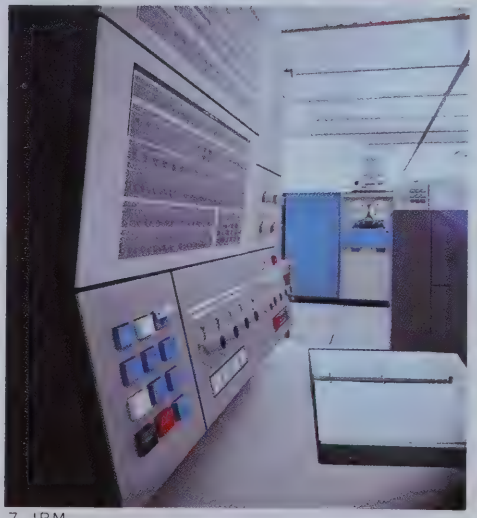
2. SCM

3. NASA

4. ZEISS

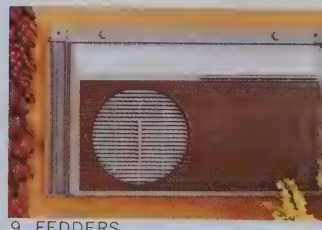
5. GE

6. MUIRHEAD & CO., LTD.

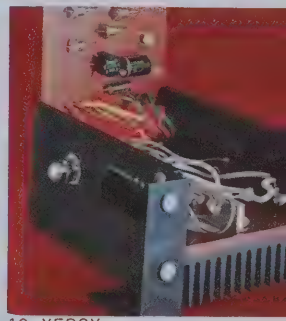


7. IBM

8. HONEYWELL



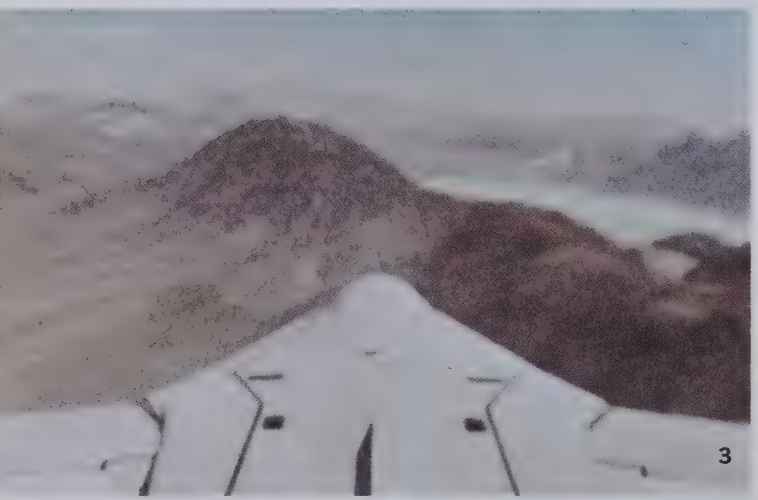
9. FEDDERS

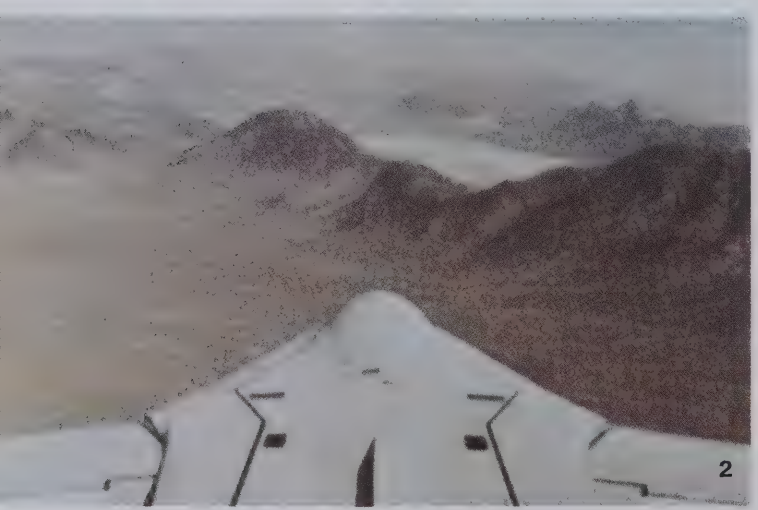


10. XEROX

11. BOSCH

Texas Instruments electronic and electrical components helped the company's customers provide advanced products to government, industry, and consumers. Examples include: 1. CINCINNATI MILLING machine tools – integrated circuits, diodes, and switching transistors; 2. SCM data printer – germanium transistors; 3. NASA Saturn Booster – transistors, diodes, integrated circuits, rectifiers; 4. ZEISS movie camera – electronic aperture control, diodes, and plastic transistors; 5. GE stereo – transistors and diodes; 6. MUIRHEAD & CO., LTD. transmitter on board R. M. S. Queen Mary – British-made silicon transistors and diodes; 7. IBM computer – transistors, rectifiers, photo sensor arrays, thermal and magnetic circuit breakers; 8. HONEYWELL computer – integrated circuits, silicon transistors, diodes; 9. FEDDERS home air conditioner – temperature sensors, circuit breakers, motor controls; 10. XEROX 2400 copier – control module containing transistors and rectifiers; 11. BOSCH power drill – motor protectors.





Equipments and Systems

Advances in technology are often applied first to meet the stringent requirements of government in defense, space exploration, and other programs. Texas Instruments in 1966 continued its role as a major contributor to technical improvements in equipments and systems for government use.

Change in industrial equipments also closely follows new developments in technology. In this significant market area, TI broadened its business position in industrial instruments and test equipment, and brought about additional technical innovations to strengthen its leadership in digital seismic equipment for petroleum exploration.

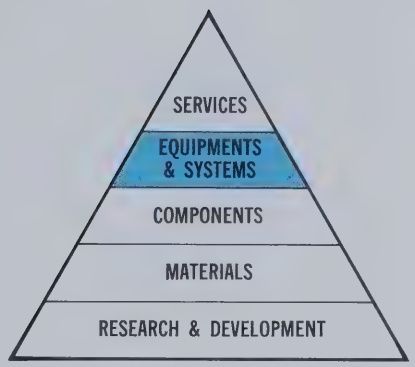
Avionics Business Grew

Technical change, in the form of radar systems which scan the terrain beneath and ahead of military aircraft, today helps military pilots make high-speed, low-level runs to avoid detection by enemy radar. TI received new contracts for forward-looking radars for A-7A, F-111A, RF-4B, and RF-4C aircraft.

As a result of the company's pioneering work, a new TI infrared system will give the U.S. Navy its first infrared mapping capability for reconnaissance aircraft to help solve the night vision problem. The production contract was awarded to TI by North American Aviation.

In association with the Bell Helicopter Company, TI engineers developed and flight tested a radically new high-resolution radar for helicopters. It can introduce major change in helicopter operations by providing pilots with "night eyes" to enable them to use the machines in darkness as well as day. The radar has antenna arrays in the

1. F-111A AIRCRAFT IN LOW-LEVEL FLIGHT . . .



New technology spurred advances in products for government programs. Rate of change was high in industrial equipment.

helicopter rotor blades, doing away with the need for a separate radar antenna and radome.

Diverse Range of Products

Aircraft approaching most of the major passenger terminals and military air bases around the world are monitored and controlled with the aid of airport surveillance radar (ASR) systems produced by TI. Canada, Denmark, Spain, and Portugal ordered systems in 1966, bringing total orders to 173. Systems shipped totalled 162; most of them are now installed and operating.

The company received $14.6 million in new contracts for production models and continued development work on the Shrike anti-radar missile. TI's total awards for this important air-to-ground weapons system reached $39.7 million. The company has a prime contract responsibility for guidance, control, and airframe sections of the missile.

Adding to the diversity of products it supplies for government use, the company began a program to develop electronic fuses for munitions. It also received a year-end award of over $7 million as the first increment of a $21 million multi-year procurement of classified electronics.

TI received a contract from Jet Propulsion Laboratories for telecommunications equipment to be used in the Mariner 1967-1969 series of space probes. The Lunar Orbiter sent aloft in 1966 included a radiation dosage measuring system from TI. The forthcoming Orbiting Geophysical Laboratory will carry TI equipment to measure charged particles in the lower ionosphere. The

2. SHRIKE MISSILES . . .

3. TI STRIP CHART RECORDERS . . .

1. F-111A AIRCRAFT IN LOW-LEVEL FLIGHT over rugged terrain under control of TI forward-looking radar system. 2. SHRIKE MISSILES carried under the wing of a Navy A-4E provide anti-radar attack capability. 3. TI STRIP CHART RECORDERS at Cape Kennedy form part of ground support complex for Apollo program.

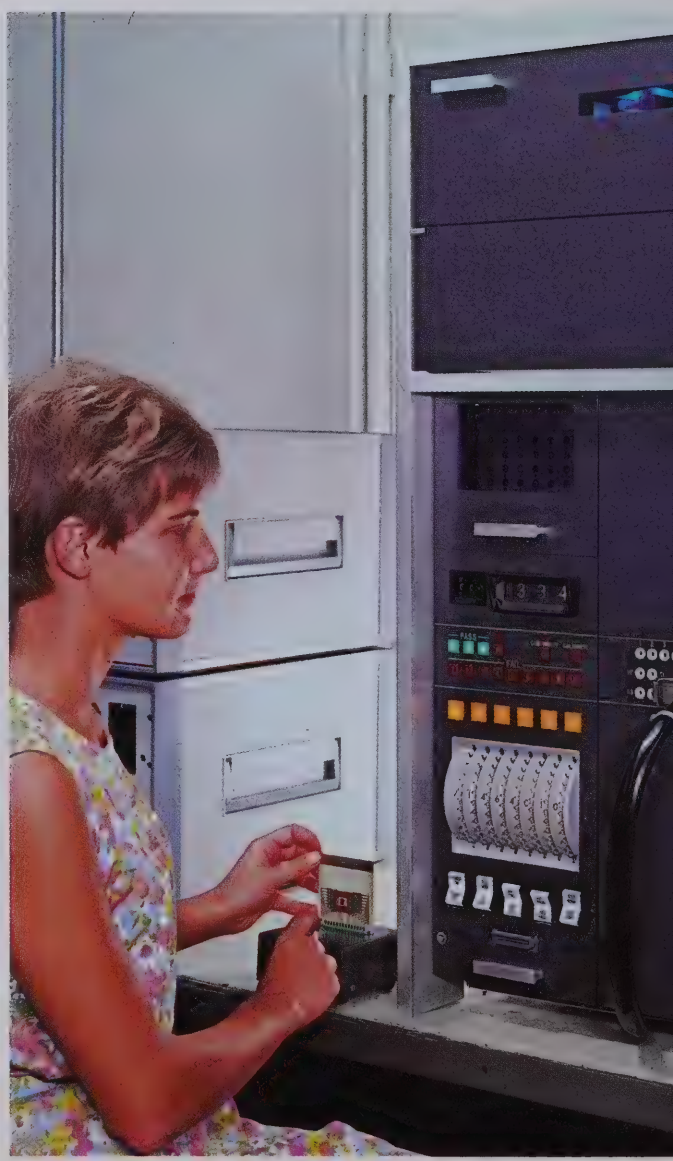
company will contribute to development of worldwide weather data collection and long-range weather forecasting with infrared equipment for the Nimbus B weather satellite to be launched in 1967. The equipment will sense infrared energy radiated from the earth's surface and atmosphere.

United States capabilities for oceanographic research are being advanced by shipborne oceanographic survey systems which collect, process, and store more kinds of information in greater volume than previously was possible. Under contract to the U.S. Navy Oceanographic Office, TI built the first such system, which is now installed and operating aboard a Navy research ship. Work on a second system began in 1966.

Geophysical Equipment Evolves Rapidly

An exceptionally high rate of change was evident in the market for geophysical exploration equipment. The equipment is sold to oil companies and to geophysical service contractors. In 1966 new designs of the company's digital seismic recording equipment and special-purpose processing equipment went into production. A portable model of the company's digital field recording equipment made it possible to carry the digital seismic exploration technology into remote regions where vehicles or boats cannot go.

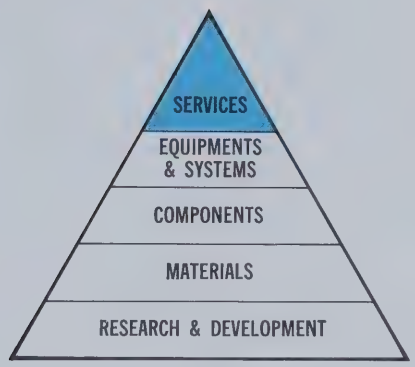
In addition to geophysical equipment, the industrial products activity manufactured strip-chart recorders, production mechanization, and test equipment for semiconductor devices and components, and other data collection and process control equipment. To support rapid growth of the activity, a new facility is under construction on the company's 200-acre site near Houston.



THIS NEW TI SYSTEM tests integrated circuits and circuit boards.

THIS NEW TI SYSTEM . . .

Geophysical services created change in petroleum exploration. Distribution services expanded.



Services

The two service operations of the company, exploration and distribution, took major additional strides in their technical development and in their services to customers in 1966. Both reached record high business levels.

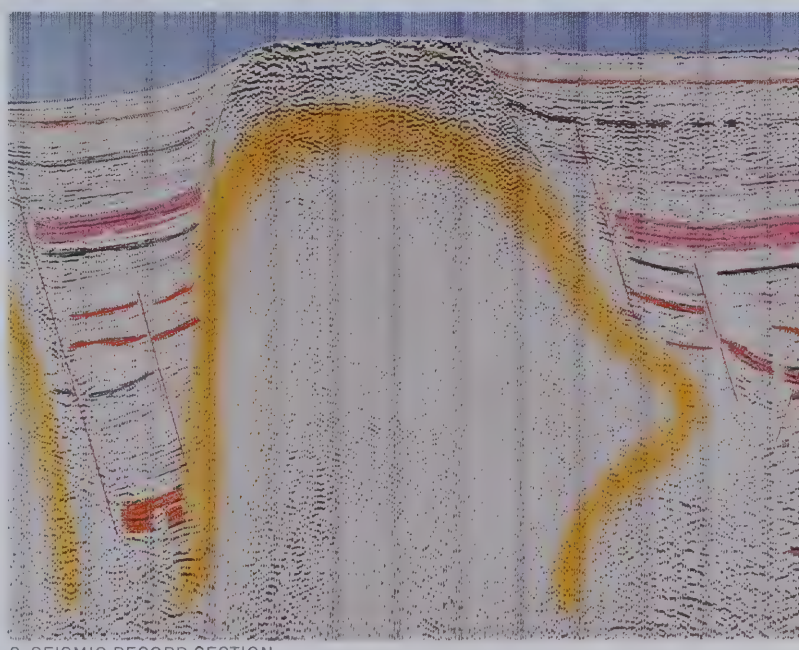
Technical Change in Petroleum Exploration

The company introduced its revolutionary new digital seismic data gathering and processing technology to the petroleum exploration industry in 1964. This technology competed with the conventional analog seismic methods then in use. In 1966 digital techniques accounted for approximately one-third of the total seismic exploration expenditures of the petroleum industry and are expected to reach as much as one-half this total in 1967.

The new seismic technology is based upon the application of the mathematical techniques of statistical communications theory to the extraction of useful geological information from seismograph records. As a system of exploration, it requires carefully controlled field procedures for the collection of data in digital format on magnetic tapes, highly sophisticated programs or "software" to extract maximum information from the data, and high-speed processing equipment or "hardware" to apply the processing programs.

During 1966, TI geophysicists stepped up to another level in software technology. They installed more powerful special-purpose equipment to apply programs that would improve the solution of more complex geophysical problems. They updated earlier models to increase their capacity and processing flexibility. The company opened seismic data processing centers in Saudi Arabia and

1. SEISMIC DATA PROCESSING CENTERS . . .



2. SEISMIC RECORD SECTION . . .

1. SEISMIC DATA PROCESSING CENTERS in worldwide network are part of change in ways to look for petroleum and other natural resources. 2. SEISMIC RECORD SECTION shows structural details of subsea salt dome.

in Los Angeles, bringing the total to eight in a worldwide network. In January, 1967, a ninth center was opened in Libya to serve oil company clients in North Africa.

The company carried out marine seismic exploration programs for oil companies over the major continental shelf areas of the world. Land crews were added in the U.S. and in such international petroleum exploration areas as North Africa, Italy, and Germany.

Oceanographic and Minerals Surveys

Marine geophysical surveys for oceanographic research continued under U.S. Navy contract for programs in the North Atlantic Ocean and related waters. The company received new research and development contracts to apply signal processing techniques, similar to those used in seismic exploration, to acoustic data related to undersea warfare problems.

Services in mapping surface geology were linked closely with the geophysical operations to bring together more elements of the problems in petroleum exploration. The company received new contracts to survey for natural resources other than petroleum, the most important being an award from the Agency for International Development for minerals inventory mapping in Colombia.

The Arms Control & Disarmament Agency awarded TI new contracts in underground nuclear test detection and identification. As a continuing part of Project VELA UNIFORM, the company produced and tested ocean-bottom seismograph stations and participated in experimental programs using this equipment.

Distributor Marketing Effort

TI Supply increased its importance as a part of the company's total marketing activity. In 1966, distribution services had the greatest per-

1. MARINE GEOPHYSICAL SURVEYS . . .

centage growth of all the operating divisions of the company.

The supply organization sells TI electrical and electronic components, and also markets the products of many other leading manufacturers of electronic components and industrial supplies.

It continued a worldwide expansion program started in 1964, and opened 11 branch and sales offices in Europe during 1966. In the U.S. and Canada it opened new operations centers in Montreal, Quebec; Garden City, New York; and Santa Monica, California.

As part of its expanded operations, it established electronics product management services to offer technical assistance to customers and provide engineering support for field sales personnel.

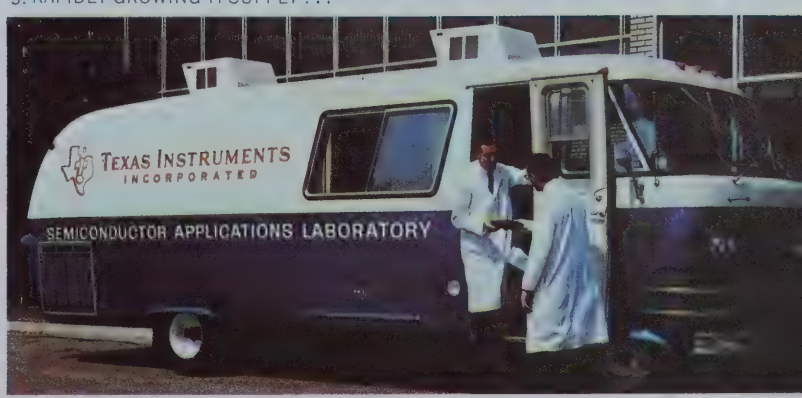
A computer-controlled inventory system, with most domestic sales offices linked directly to a principal warehouse in Dallas, and with telecommunications to European offices, enabled the company to provide rapid delivery of orders to customers.

From work that spans a spectrum from basic materials to components, systems, and services, TI provided new ways to do things better for its customers and for society. Applying its advanced technologies in a creative environment in which the men and women of TI can realize to the fullest their potential for human effectiveness, the company's purpose in the future, as in 1966, is to continue to advance constructively the process of creating change.

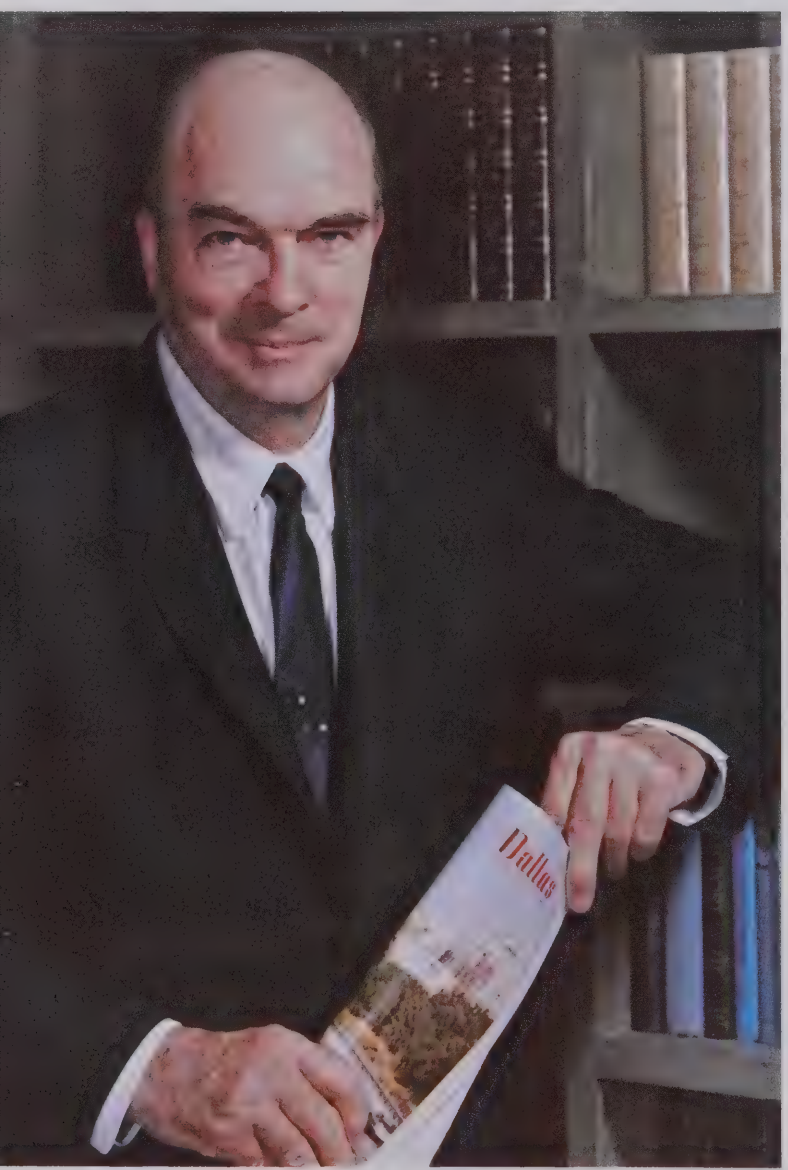
1. MARINE GEOPHYSICAL SURVEYS continue as part of the U.S. Navy's oceanographic program. 2. FAST RESPONSE to customer needs is provided by this computerized inquiry service. 3. RAPIDLY GROWING TI SUPPLY has branches and sales offices in 11 North American and 18 European locations. 4. ENGINEERING SUPPORT in use of integrated circuits and other components is provided by this mobile applications laboratory.

2. FAST RESPONSE . . .

3. RAPIDLY GROWING TI SUPPLY . . .



4. ENGINEERING SUPPORT . . .



Erik Jonsson *retired December 31, 1966, as Chairman of the Board of Directors and as an employee of Texas Instruments Incorporated. He has been designated* Honorary Chairman *and will continue to serve as a director of the company.*

Mr. Jonsson's association with Texas Instruments began with its predecessor company, Geophysical Service Inc., shortly after the founding of that company in 1930.

In the succeeding 36 years, he has been a principal influence in developing the particular character of Texas Instruments. Employees of the company, its shareowners, and its customers are deeply indebted to him for his leadership in establishing the basis for the growth and development of Texas Instruments from a single line business to a highly diversified, technologically based corporation; for his sound judgment, managerial skills, and financial direction; for the influence of his own high principles and integrity upon the policies and principles to which the company is committed and by which it operates; and for the recruitment, inspiration, and encouragement of the accomplishments of others.

Directors and Officers

Directors

P. E. Haggerty, *Chairman*
Lloyd V. Berkner
Cecil H. Green
S. T. Harris
J. E. Jonsson, *Honorary Chairman*
Ewen C. MacVeagh
Eugene McDermott
Mark Shepherd, Jr.
C. J. Thomsen

Officers

P. E. Haggerty, *Chairman of the Board and Chief Executive Officer*
Mark Shepherd, Jr., *President and Chief Operating Officer*
S. T. Harris, *Senior Vice President*
W. F. Joyce, *Senior Vice President*
C. J. Thomsen, *Senior Vice President*
J. F. Bucy, *Vice President*
Cecil P. Dotson, *Vice President*
R. C. Dunlap, Jr., *Vice President*
Philip J. Gomez, *Vice President*
R. W. Olson, *Vice President*
Jay R. Reese, *Vice President*
Bryan F. Smith, *Vice President and Secretary*
Mark K. Smith, *Vice President*
E. O. Vetter, *Vice President*
John F. Wilson, *Vice President*
H. J. Wissemann, *Vice President*
Richard J. Hanschen, *Assistant Vice President*
Ronald F. Keener, *Assistant Vice President*
George E. Livings, *Treasurer*
Howard Moss, *Assistant Vice President*
A. N. Provost, *Assistant Vice President*
James R. Reese, *Assistant Vice President*
John M. Walker, *Controller*
Sol Goodell, *Assistant Secretary*
Nelle C. Johnston, *Assistant Secretary*
William J. Roche, *Assistant Secretary*

Common Stock Listed on New York Stock Exchange

Transfer Agents

Registrar and Transfer Company (New York), Republic National Bank of Dallas

Registrars

Morgan Guaranty Trust Company of New York, First National Bank in Dallas

Consolidated Financial Statements *In Thousands of Dollars*

	For the year ended December 31 1966	December 31 1965
Income and Retained Earnings		
Net sales	$580,314	$436,369
Operating costs and expenses		
Cost of goods and services sold	406,883	308,023
General, administrative, and marketing	85,023	62,515
Employees' retirement and profit sharing plans	23,230	19,364
Total	515,136	389,902
Profit from operations	65,178	46,467
Other income (net)	1,415	872
Interest on loans	(2,871)	(1,066)
	63,722	46,273
Provisions for income taxes, redeterminations, and renegotiation	29,768	21,434
Net income	33,954	24,839
Retained earnings at beginning of year	113,891	94,098
Cash dividends declared on common stock – 1966 – 57½¢ per share; 1965 – 50¢ per share (as adjusted for stock split)	(5,937)	(5,046)
Retained earnings at end of year	$141,908	$113,891
Sources and Uses of Working Capital		
Sources of working capital		
Net income	$ 33,954	$ 24,839
Charges not requiring working capital		
Depreciation and amortization	29,590	19,257
Deferred incentive compensation	881	1,082
Total	64,425	45,178
Proceeds (less expenses) from issuance of		
599,031 shares of common stock	53,573	—
4.80% sinking fund debentures due 1990	3,337	46,104
Common stock under options	3,112	1,084
Long-term borrowing of overseas subsidiaries	—	2,128
	124,447	94,494
Uses of working capital		
Additions (net) to property, plant, and equipment	71,933	44,090
Purchase of common stock of the company for incentive compensation plan	1,594	1,442
Reduction of long-term debt	193	3,938
Dividends on common stock	5,937	5,046
Other	876	202
	80,533	54,718
Increase in working capital	$ 43,914	$ 39,776

See accompanying notes.

Balance Sheet

	December 31 1966	December 31 1965
Assets		
Current assets		
Cash and short-term investments	$ 85,643	$ 59,594
Accounts receivable	95,655	73,221
Inventories	80,789	64,751
Prepaid expenses	3,232	3,162
Deduct contract progress billings	(12,494)	(14,661)
Total current assets	252,825	186,067
Property, plant, and equipment at cost	203,932	141,707
Less accumulated depreciation	79,616	59,806
	124,316	81,901
Other assets and deferred charges	5,339	2,858
	$382,480	$270,826
Liabilities and Shareowners' Equity		
Current liabilities		
Loans payable (overseas subsidiaries)	$ 6,432	$ 3,489
Accounts payable and accrued expenses	52,637	42,297
Income taxes, redeterminations, and renegotiation	27,377	22,010
Accrued retirement and profit sharing contributions	23,196	19,360
Dividends payable in January	1,620	1,262
Total current liabilities	111,262	88,418
Deferred liabilities		
Long-term debt	51,935	48,708
Incentive compensation	1,963	1,082
Total deferred liabilities	53,898	49,790
Shareowners' equity (10,800,240 common shares outstanding at December 31, 1966)	217,320	132,618
	$382,480	$270,826

See accompanying notes.

Notes to Financial Statements

NOTE 1 – OPERATIONS OUTSIDE UNITED STATES

Approximately 20% of consolidated net sales for 1966 was from operations outside the United States and a similar percentage of net assets at December 31, 1966, was located in such areas.

NOTE 2 – INVENTORIES

Inventories, stated at the lower of cost (currently adjusted standard or average) or market,were as follows:

	Thousands of Dollars	
	1966	*1965*
Materials and purchased parts	$ 25,603	$ 18,789
Work in process	43,308	38,009
Finished goods	11,878	7,953
	$ 80,789	$ 64,751

NOTE 3 — PROPERTY, PLANT, AND EQUIPMENT

	Thousands of Dollars	
	1966	*1965*
Land	$ 3,650	$ 3,623
Buildings	74,826	55,160
Machinery and equipment	125,456	82,924
	$203,932	$141,707

Costs to complete plant and equipment projects in process at December 31, 1966, were estimated at $36 million.

NOTE 4 – LONG-TERM DEBT

	Thousands of Dollars	
	1966	*1965*
4.80% sinking fund debentures due 1990; annual sinking fund payments of $2,500,000 commence in 1971	$ 50,000	$ 46,580
Notes payable (overseas subsidiaries)	1,935	2,128
	$ 51,935	$ 48,708

NOTE 5 – RETIREMENT PLANS

Employees of the company and its principal subsidiaries are covered by non-contributory retirement plans. Total expense under the plans was $8,766,000 in 1966 and $8,098,000 in 1965, including amortization of prior service cost, which is expected to be fully amortized in approximately four more years. The company's policy is to fund retirement cost annually. At December 31, 1966, the total of the retirement fund and the balance sheet accruals exceeded the actuarially computed value of vested benefits.

NOTE 6 — SHAREOWNERS' EQUITY

Shareowners' equity consisted of the following:

			Thousands of Dollars	
			1966	*1965*
Cumulative preferred stock, $25 par value; authorized 750,000 shares			$ —	$ —
Common stock, $1 par value	Year	Shares		
Authorized	1966	12,500,000		
	1965	8,000,000		
Issued	1966	10,834,378	10,834	
	1965	5,058,222		5,058
Additional paid-in capital			64,578	13,669
Retained earnings			141,908	113,891
			$217,320	$132,618

Shares issued include 34,138 and 19,918 in 1966 and 1965, respectively, purchased for awards under the company's incentive compensation plan and included in other assets and deferred charges.

During 1966, shareowners approved (1) an increase in authorized shares of common stock from 8,000,000 to 12,500,000 shares and (2) a two-for-one stock split. Changes in common stock and additional paid-in capital

accounts during 1966 were as follows: (1) $5,085,000, the par value of the shares issued in connection with the two-for-one split, was reclassified from additional paid-in capital to common stock; (2) $691,000 was added to common stock and $55,994,000 (after deducting expenses) was added to additional paid-in capital as the result of the issuance of 599,031 shares in connection with a rights offering to shareowners and the issuance of 92,155 shares (118,903 shares after adjustment for two-for-one split) on exercise of stock options.

NOTE 7 – STOCK OPTIONS AND RESERVATIONS OF COMMON STOCK

At December 31, 1966, 361,086 shares of common stock (adjusted for the two-for-one stock split) were reserved for then outstanding options (aggregate option price $10,271,000) under a 1957 restricted stock option plan, of which 110,653 shares were then exercisable. Options are exercisable from time to time through 1973; exercise of the major portion is contingent upon attainment of specified earnings per share. This plan terminated as to further grants in 1965. During 1966, options on 108,598 shares (total consideration $2,722,000) were exercised and options on 200 shares were terminated.

Also, 595,165 shares of common stock (adjusted) were reserved at December 31, 1966, under a 1965 qualified stock option plan for officers and key employees, including 204,615 shares (aggregate option price $18,399,000) for then outstanding options, of which 5,335 shares were then exercisable. These options expire five years from date of grant and become exercisable over the last four years of the option term in percentage installments, cumulatively, upon attainment of specified earnings per share. During 1966, options on 4,835 shares (total consideration $271,000) were exercised.

In addition to the above, 1,134 shares (adjusted) were reserved at December 31, 1966, for options (aggregate option price $24,000) granted in 1959 pursuant to a merger agreement. These options are presently exercisable and will expire in 1968. Options on 5,470 shares were exercised in 1966 for a total consideration of $119,000.

Accountants' Report

The Board of Directors
Texas Instruments Incorporated

We have examined the accompanying consolidated balance sheet of Texas Instruments Incorporated and subsidiaries at December 31, 1966, and the related consolidated statements of income and retained earnings and of sources and uses of working capital for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. It was not practicable to confirm certain accounts receivable, as to which we satisfied ourselves by means of other auditing procedures.

In our opinion, the statements mentioned above present fairly the consolidated financial position of Texas Instruments Incorporated and subsidiaries at December 31, 1966, the consolidated results of their operations, and sources and uses of their consolidated working capital for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ARTHUR YOUNG & COMPANY

Dallas, Texas
February 14, 1967

Printed in U.S.A.

Creating Change — *Through Increased Human Effectiveness*

Technical innovation leads to useful new products and services to fill the needs of society. Innovation in how people plan and manage their own work can lead to greater realization of their individual potential.

This idea — to elevate jobs to more than the routine performance of set tasks — is taking on real meaning among a growing percentage of the men and women of Texas Instruments.

These examples illustrate how the people of TI contributed to their own — and the company's — success in 1966.

PLANNING TOGETHER, this group worked out ways to reduce time to produce a radar from 130 to as low as 36 hours per system.

STAFF MEMBERS in geophysical data processing centers in the U.S. and England analyzed their own operating methods and markedly improved throughput.

OPERATOR in germanium transistor test group wrote training manual from operator's viewpoint that stepped up job knowledge and effectiveness of her entire assembly and test section.